

Notice of Allowability

Application No.

09/761,983

Examiner

Anthony T Ton

Applicant(s)

UMAYABASHI, MASAKI

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/30/2004.
2. ☒ The allowed claim(s) is/are 1-19.
3. ☒ The drawings filed on 30 August 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12/9/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


PHIRIN SAM
PRIMARY EXAMINER

DETAILED ACTION

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance:

a) **In Regarding to Claims 1-6:** The prior arts of record fail to teach a timeslot assignment method for a communication system in which a plurality of end-user systems are connected to a timeslot assignment unit via a common transmission medium, each of the end-user systems comprising a buffer for storing packets of either variable or constant length and forwarding packets from the buffer on assigned timeslots, the method comprising a combination of steps of:

using a first count number and a second count number for determining a third count number of packets in the buffer to which timeslots are still not assigned; and

assigning timeslots to packets of each end-user system based on an order of rank of third count numbers of respective ones of the plurality of end-user systems.

b) **In Regarding to Claims 7-12:** The prior arts of record fail to teach a communication system, the system comprising a combination of steps of:

a controller for determining a total value of count numbers stored in each entry of a timeslot count table, receiving a queue length indicating signal from each of end-user systems, using the total count number and the received queue length for determining a virtual queue length of each end-user system indicating a count number of packets in the buffer to which timeslots are still not assigned, assigning timeslots to each end-user system based on an order of rank of virtual queue lengths of respective ones of the plurality of end-user systems, and storing

a count number of the assigned timeslots in an entry of a timeslot count table corresponding to the each end-user system.

c) In Regarding to Claims 13-19: The prior arts of record fail to teach a communication system, the system comprising a combination of steps of:

a controller for forwarding packets from a buffer on timeslots assigned by a timeslot assignment unit, determining a total value of count numbers stored in the buffer, determining, from the total value and a queue length, a virtual queue length indicating a count number of packets in the buffer to which timeslots are still not assigned, and transmitting a signal to the timeslot assignment unit for indicating the virtual queue length, and

the timeslot assignment unit receiving the virtual queue length indicating signal from each of the end-user systems and assigning timeslots to each end-user system based on an order of rank of received virtual queue lengths of respective ones of the plurality of the end-user systems.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Examiner Information

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Anthony T Ton** whose telephone number is **571-272-3076**. The examiner can normally be reached on M-F: 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Ken Vanderpuye** can be reached on **571-272-3078**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

by: 
Anthony T. Ton
Patent Examiner
January 07, 2005


PHIRIN SAM
PRIMARY EXAMINER